

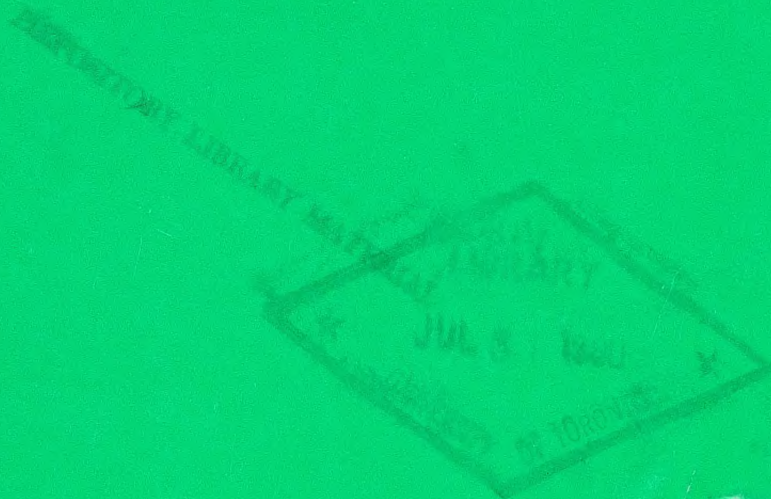
An Exercise Program for
the Older Canadian



Take It Easy...

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HW 82
80 T12

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Government of Canada
Fitness and Amateur Sport

Gouvernement du Canada
Condition physique et Sport amateur





...But Take It!

CA1
HW 82
-80T12

Recent research has clearly shown that physical fitness, so essential in youth and mid-age, becomes even more critical after age fifty. Regular physical activity and sensible eating are the key factors in the prevention of the physical decline often associated with aging.

Many older Canadians, aware of the relationship of physical activity to good health, are seeking direction in their pursuit of fitness. This booklet was prepared in response to that need and the many requests for a Home Exercise Program which is both safe and effective for older persons. Its title, "**Take It Easy . . . But Take It**"* implies an ENJOYABLE and GRADUAL approach to exercise.

You will exercise at your own level, without strain, and progress slowly toward your personal fitness goal. Participation in the program requires a minimum of your time — just three to four hours a week. For variety and all-round fitness benefits, it is best to use

it every second day while enjoying recreational activities such as golf, curling, or hiking on the alternate days. Parts of the program may also be used at various other times throughout the day — to loosen up while watching television, to warm-up before a sport or fitness activity, to relieve tension and help you relax.

The program was prepared for home use and may be performed alone, with a partner or in a small group. It was designed to provide exercises and activities which:

- develop and maintain the basic components of fitness
- enhance your body structure by helping to control body weight, reduce fat and tone muscles.

Regular exercise will also improve balance and co-ordination to some extent, and increase one's confidence in movement activities.

For important information on activity and aging, sports, fitness and recreational pursuits, read **Don't Take It Easy**, the companion publication to this booklet. If you are ready to start moving — read on!

Basic Components of Fitness

1 Cardiorespiratory (Heart-Lung) Endurance

Value

- increased vitality, energy and stamina
- stronger heart and lungs, better circulation
- increased resistance to disease

Development



Every day
Movement



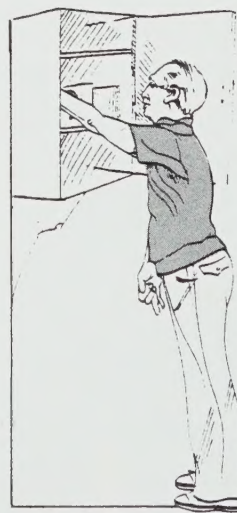
Home Exercise
Program

2 Flexibility (Suppleness)

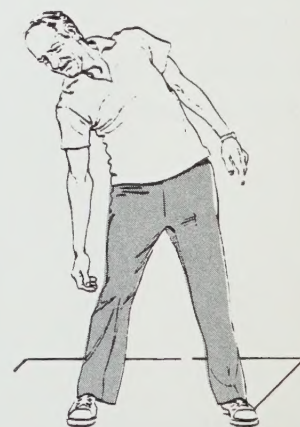
Value

- more attractive appearance: firmer muscles and better posture.
- reduces strain of daily activity
- essential for sport or recreational activities

Development



Everyday
Movement



Home Exercise
Program



3 Strength and Muscular Endurance

Value

- maintains mobility and youthful body movement
- prevents or relieves soreness in joints and muscles
- improves posture


Development



Everyday
Movement



Home Exercise
Program



Take a moment to complete the following questions taken from the Physical Activity Readiness Questionnaire (PAR-Q).

Let's Begin

PAR-Q

YES NO (✓)

- | | | | |
|--------------------------|--------------------------|----------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1 | Has your doctor ever said you have heart trouble? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2 | Do you frequently have pains in your heart and chest? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3 | Do you often feel faint or have spells of severe dizziness? |
| <input type="checkbox"/> | <input type="checkbox"/> | 4 | Has a doctor ever said your blood pressure was too high? |
| <input type="checkbox"/> | <input type="checkbox"/> | 5 | Has your doctor ever told you that you have a bone or joint problem such as arthritis that has been aggravated by exercise, or might be made worse with exercise? |
| <input type="checkbox"/> | <input type="checkbox"/> | 6 | Is there a good physical reason not mentioned here why you should not follow an activity program even if you wanted to? |
| <input type="checkbox"/> | <input type="checkbox"/> | 7 | Are you over 65 and not accustomed to vigorous exercise? |

Reference: PAR-Q Validation Report, British Columbia, Ministry of Health, May 1978.

If you answered yes to one or more questions, consult with your physician before using the Exercise Program. Show this booklet to your doctor and seek advice as to which exercises or activities are suitable for your specific needs.

If you answered no to all questions you have reasonable assurance of your present suitability for use of the Exercise Program. If, however, any aspect of the program worries you, or you intend to engage in vigorous activities more strenuous than walking, it is advisable to consult with your physician.



The Home Exercise Program consists of 3 stages designed to provide a safe and effective fitness workout. This progression should be used when participating in any fitness activity or sport.

1 WARM-UP

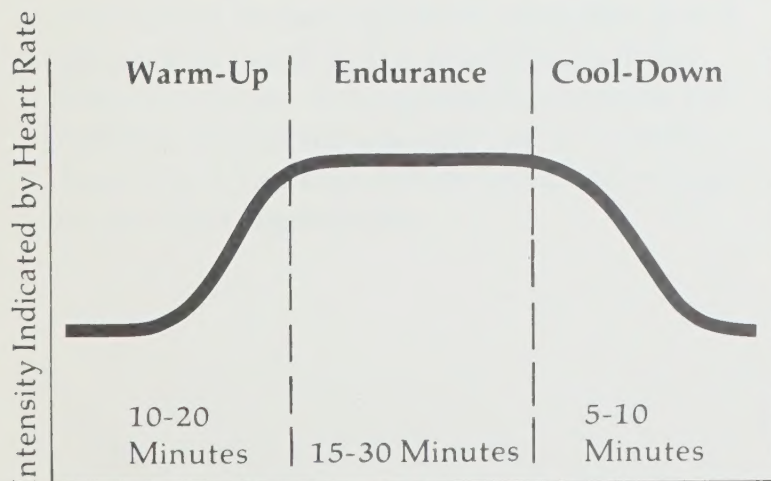
Loosen and Limber: gentle exercise to increase flexibility and prepare the body for more strenuous activity.

Stretching: to prevent muscle soreness or injury.

2 ENDURANCE

Shape-Up: more strenuous muscular exercise to tone and shape muscles.

A TYPICAL EXERCISE SESSION




Aerobics: vigorous movement such as brisk walking, cycling or other activities which develop the heart-lung system.

3 COOL-DOWN

Slow Walking: to allow a gradual transition from vigorous exercise to the resting state. The muscles which help pump the blood back to the heart are turned off abruptly if exercise is stopped suddenly. This results in a lessened return of blood to the heart. The heart then may begin to beat more rapidly, causing a drop in blood pressure and subsequent dizziness or possible fainting.

Relaxation Exercises: to reduce tension.

Stretching: to prevent stiffness or muscle soreness.



An Exercise Program For The Older Canadian

Guidelines for Use

1

Wear comfortable, loose-fitting clothing and remove any dangling jewelry. The exercises may be done in bare feet but solid well-fitting shoes with low or no heels are essential for the walking part of the program.

2

Make exercising more fun by using music. Turn on the radio, play a record or tape with a good underlying rhythm.

3

For optimal fitness benefits, perform the complete program every second day (3 to 4 times a week). The Warm-Up and Cool-Down exercises may also be used at any other time to loosen up or to help you relax. The Endurance activities must always be preceded by a warm-up and followed by a cool-down.

4

Postpone your participation when you have a temporary illness or when the weather is extremely hot or humid.

5

If any exercise hurts during execution, change it. Some stiffness is normal when you begin. However, if this persists or you feel unduly fatigued after exercising, you have worked too hard. Slow down, and progress more gradually.

6

Stop exercising and consult your physician if any of the following occur: nausea, dizziness, breathlessness or tightness in the chest.



7

Ensure a good base of support to avoid falls. Use a wall or chair for support when bending or balancing.

8

Breathe normally, trying to “exhale on effort”, i.e. blow out when performing the more difficult part of the exercise.

9

Perform all the exercises in a smooth, rhythmical manner, allowing the muscles to relax after contraction. Hold the stretches for 5 to 15 seconds and do not bounce.

10

Know your own limits and progress at your own speed. Repeat the slow stretches 2 or 3 times. Start with 2 or 3 repetitions of the other exercises, then gradually increase the number of repetitions (add 1 or 2 a week). Stop when you experience “pleasant fatigue” in the working muscles.

11

The exercises marked with a star (★) are particularly important for maintaining postural muscles, and preventing and relieving low-back pain. The exercises marked with a triangle (▲) are particularly important warm-up exercises to use before aerobic activities or prior to playing a sport. If doing a shortened program, include those exercises marked (★) and (▲).

12

Have Fun!

1 WARM-UP: LIMBER AND STRETCH

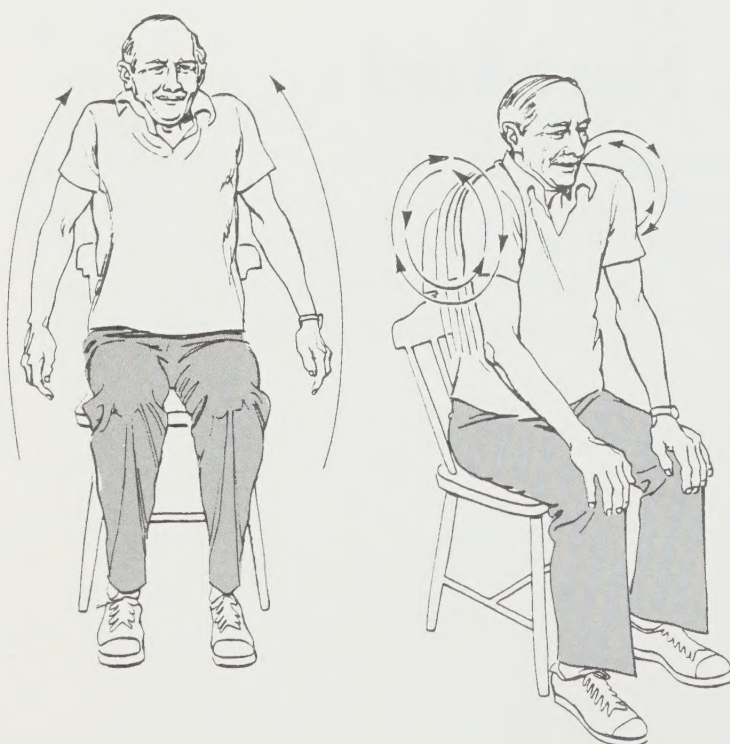
Perform Anytime:
To loosen up while watching television
or to stretch out before participating
in a sport or endurance activity.



1 Neck Exercise

- Sit in chair, arms and shoulders relaxed
- Count 1: s-l-o-w-l-y drop head back as far as possible
- Count 2: drop head s-l-o-w-l-y forward, chin toward chest
- Count 3: s-l-o-w-l-y drop head to one side, ear towards shoulder
- Count 4: repeat to other side
- Movements should be gentle and controlled to avoid strain or dizziness. Do not perform when standing

★ 2 Shoulder Release



- Sit or stand tall, arms relaxed
- shrug shoulders up towards ears and relax them down
- rotate shoulders forward s-l-o-w-l-y, making 2 or 3 complete rotations
- rotate shoulders BACKWARD 3 to 5 times



3 Hand and Finger Exercises

- Sit or stand, arms extended forward
- Close fist tightly, then extend fingers. Repeat 5 or 6 times
- Relax arms at sides and “shake out” the hands loosely, from the wrists

4 Ankle Rotations



- Sit in a chair or use a wall or chair for support when standing
- Extend one leg and rotate the foot, making complete circles from the ankle
- Repeat with other foot



5 Sitting Stretches

a) Single Arm Stretch

- Inhale as you stretch one arm up over head as high as possible
- Exhale as you relax and drop arm down
- Alternate arms and repeat

b) Trunk Twist with Arm Stretch

- Stretch one arm out with palm facing back
- Slowly twist head, shoulder and trunk to side as far as comfortable for you. Hold for 5 seconds, then relax
- Repeat to other side

▲★ Hip Stretch

- Sit on one side edge of chair
- Exhale as you bring the outside knee towards your chest
- Return foot to floor and inhale as you extend leg back as far as possible
- Alternate legs

▲★ 6 Hamstring Stretch

a) Easier: In a Chair

- Sit with one knee bent and the other leg resting on a chair or table of the same height
- Keeping the leg straight, gently bend forward from the waist until a comfortable stretch is felt. Hold
- Repeat with other leg





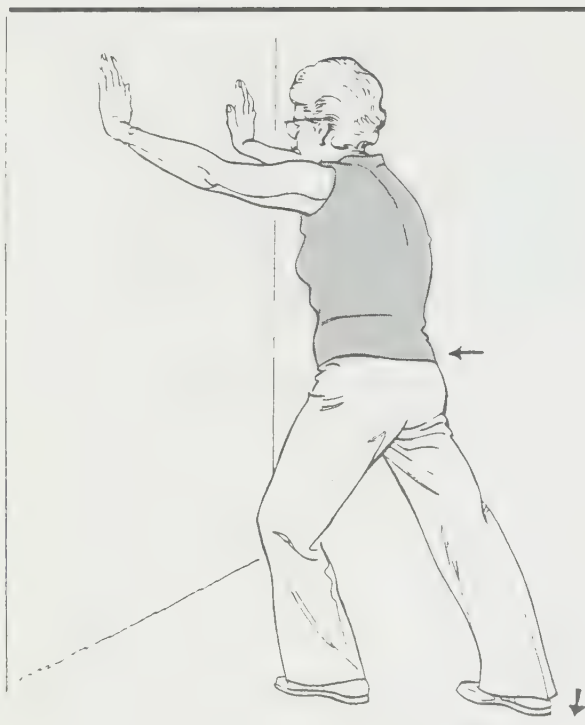
or b) More difficult: On the Floor

- Lie on back, one knee well bent and the other leg extended.
- Slowly lift straight leg up towards head until a comfortable stretch is felt. Hold
- Repeat with other leg
- Keep lower back pressed to floor to protect back
- A pillow or towel under the head will add comfort and support



7 Side Bends

- **Caution:** If you are experiencing back pain, omit this exercise and check with your physician
- Stand with feet wide apart
- S-l-o-w-l-y reach one arm down the outside of the leg while exhaling. Hold
- Repeat to the other side
- May also be done sitting: hold side edge of chair with one hand and reach down to other side



▲★ 8 Calf Stretch

- With both hands resting on a wall, place one foot ahead of the other, front leg bent and rear leg stretched out straight, to the back
- Keeping back heel flat on floor, lower hips in towards wall until comfortable stretch is felt in the back leg
- Keep body straight and avoid arching the back
- Hold, don't bounce
- Change legs and repeat

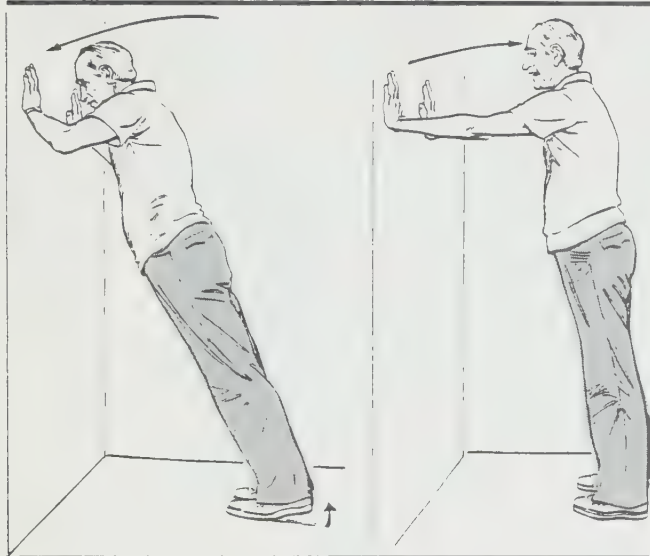
9 Leg and Arm Swing

- Stand holding chair or wall with one hand for support
- Swing outside arm and leg back and forth in a relaxed rhythmical manner
- Turn around and repeat on other side
- *Caution:* Do not over-extend the back by forcing the leg up high to the back



2 ENDURANCE: SHAPE UP

These exercises are more strenuous and should be preceded by the warm-up.



10 Wall Push-Aways (for arm strength)

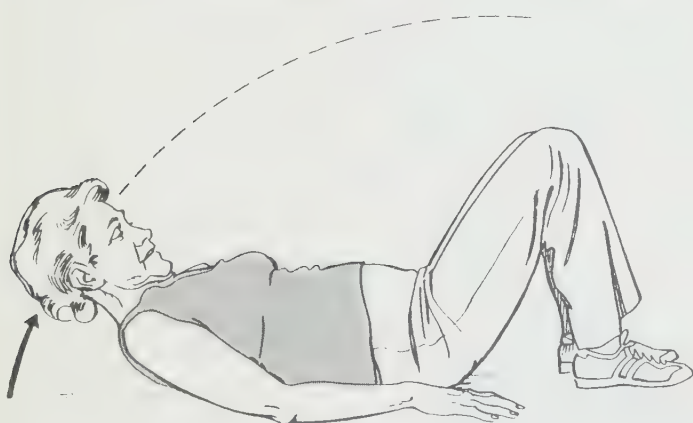
- Stand facing a wall, arms' length away
- Inhale as you bend arms and lower your body to the wall. Allow heels to lift off floor
- Exhale as you push back to standing



★ 11 Abdominal Exercises

a) Easier: The Roll Down

- Sit with knees bent, hands resting on knees, and chin tucked in to chest
- Exhale as you s-l-o-w-l-y lower down: first back, then shoulders, then head to touch floor
- Knees remain bent throughout
- Use arms to assist back to sit position and repeat



or b) More Difficult: The Curl Up

- Lie on back, knees bent, feet flat on floor, arms relaxed at sides
- Press small of back flat to the floor
- Lift head and shoulders off floor and look toward knees while exhaling
- Relax and repeat
- When you have sufficient strength, curl up to sitting position, exhaling as you come up

★ 12 Single Knee Tuck (for lower back)

- Lie on back, one leg straight and one leg bent
- Keeping bent leg still, grasp hands behind the other knee and pull knee toward chest while exhaling. Hold
- Return to starting position
- Repeat, alternating legs
- Lower back and head remain on floor throughout



13 Side Leg Raises (For thighs, hips and waist)

- Lie on one side with head resting comfortably on extended arm, the other arm and hand resting on floor in front of waist (to maintain balance)
- Bottom leg should be bent at the knee to protect the back
- Exhale as you slowly raise top leg and inhale as you lower it
- Top leg should remain straight and toes should point forward throughout
- Repeat on other side



3

ENDURANCE: AEROBICS

IMPORTANT: Always Warm-up Before Performing Endurance Activities



14 Walking or other Aerobic activity:

To develop heart-lung endurance, tone legs, burn calories, increase vigour and promote relaxation.

Walking

- Begin with easy walking, while “shaking out” hands loosely and breathing naturally. This brings about a gradual increase in blood flow and prepares your body for more vigorous movement. Then walk briskly. Contact the ground with the heel first in order to minimize strain on the joints. Start with 10 minutes and gradually increase this time, until you are able to walk **comfortably** for 30 minutes. Stay at this level for 2 weeks. Then, by monitoring your pace, you may safely begin to walk more quickly or attempt a few hills to further benefit the heart-lung system. Take the simple “talk test”. If at any time during exercise you cannot talk in a normal voice, you are pushing too hard and should slow down. The most accurate way to determine if you are exercising at the appropriate intensity is by counting your heart rate or pulse.

How to Monitor Your Pulse

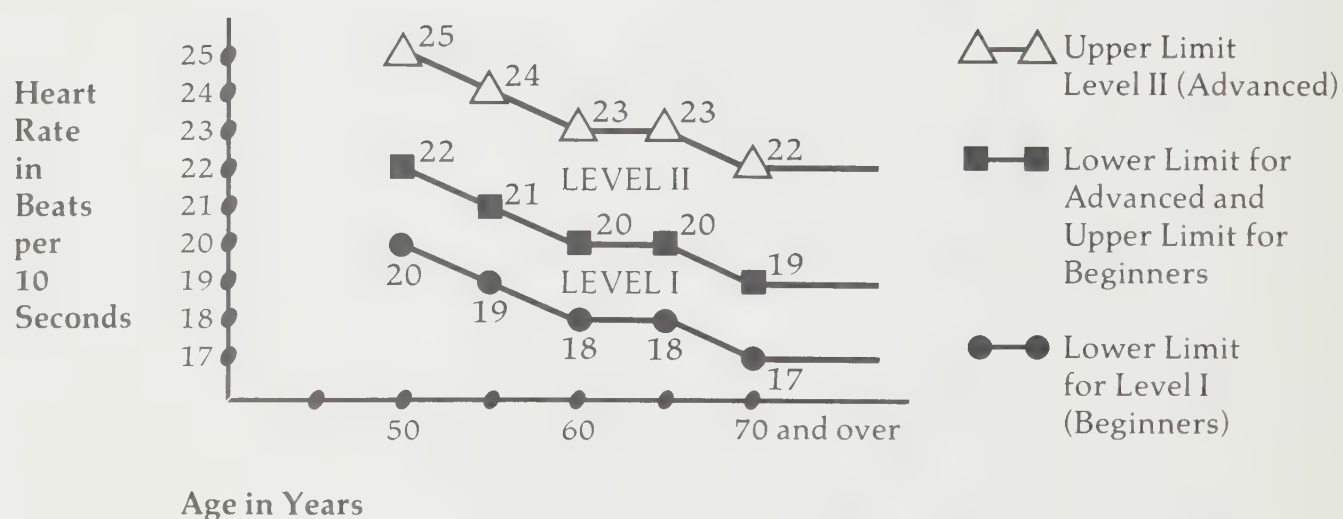
- **Radial Pulse Rate**
Place the middle three fingers of one hand along the thumb edge of the wrist just below the base of the thumb. Locate the radial pulse. Stop your activity momentarily and count your pulse (as illustrated) **For 10 Seconds**. Begin counting immediately as the heart rate will decrease significantly after 15 seconds. Finding your pulse and learning to get an accurate heart rate takes practice. It is advisable to try it out in various settings until you master the technique.



In the normal individual, the rise in heart rate during exercise is directly proportional to the stress imposed on the heart, lungs and blood vessels. By using this measure and considering one's age and activity level, individual limits

can be established. *The "Heart Rate Target Zone" sets a safe limit for you while insuring that the exercise is intense enough to be beneficial.

HEART RATE TARGET ZONE



NOTE:

Level I Beginner, unaccustomed to vigorous activity

Level II Advanced, active in vigorous activity at least 3 times a week, or after a month of training at the Beginner level.

***Note:** Heart rate monitoring is *not* accurate for individuals who are taking medication for hypertension or heart disease which suppresses heart rate (eg. Inderal). For individuals on such medication, your doctor's advice and use of the "talk-test" is recommended.



Consult the chart opposite to see if your pulse count is within the target zone appropriate for your age and level of activity. If it is too low, stride more briskly; if it is too high, slow down your pace. When your measured pulse count falls within the Heart Rate Target Zone, you are achieving a beneficial "training effect." Below the lower limit, the intensity is insufficient to improve heart-lung fitness; above the upper limit there is little added benefit. Beginners should attempt to maintain a heart rate within Level I for at least one month. Once your fitness level improves, you may choose to go to Level II. The advanced upper limit is appropriate only for those in very good condition.

A minimum of 15 minutes should be spent with the pulse rate in the target zone in order to achieve a significant conditioning effect. Start with 2 to 3 minutes only, and gradually increase the length of time spent within your target zone.

Walk-Jog, Jogging

When you are again comfortable with a brisk 30 minute walk you may wish to begin to intersperse easy jogging steps with walking. The walking can be progressively decreased until continuous jogging is accomplished. If you feel stiff from the previous workout, don't stop but stretch the sore muscles and remain with that duration of jogging until the soreness disappears. A good warm-up is especially important to prevent strain or injury. Exercises to stretch the hips, upper and lower leg muscles should be included. Jog heel-first, wear proper jogging shoes and pay

careful attention to blisters or other foot problems. Choose grass instead of pavement whenever possible to minimize stress on ankle and knee joints. It is not always necessary to progress to jogging. Brisk walking which elevates your heart rate to the target zone may be more appropriate for you. Remember: you should be able to carry on a conversation throughout. Monitor your pulse immediately after a jogging interval. Is it within the target zone?

Alternative aerobics

If you are unable to go out for a walk, you may want to perform aerobic activities in your home or apartment. Two alternatives which many enjoy are: dancing and marching to music, or riding a stationary bicycle. Start with 3 to 5 minutes and gradually increase the duration. Self-monitor the intensity of the activity by checking your pulse. When appropriate for you, dance more vigorously or increase the tension on a stationary bicycle.

Some older Canadians are concerned about overdoing vigorous aerobics. This need not be. Moderate your participation by following the advice of your physician and using common sense. Though monitoring your pulse may be the most exact way of setting limits, it is also important to be aware of body cues. Slow down and rest if you feel winded or fatigued. Progress at your own speed. "Listen" to your body — it has a very reliable signal system. Dizziness, nausea, breathlessness or tightness in the chest indicate overexertion, and the need to consult with your doctor.

Several months are often needed to restore aerobic fitness. Stick with it — those who do will literally stay "young at heart."

4

COOL-DOWN

Perform after Aerobics or any other time to relax



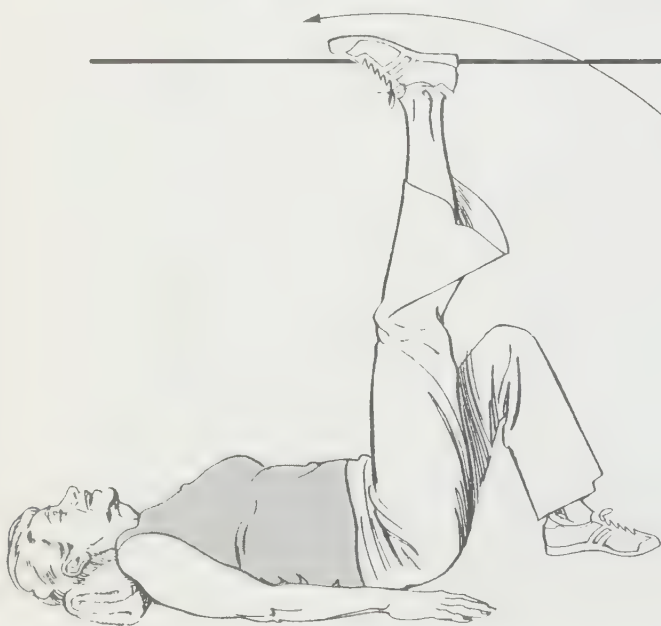
15 Easy Walking

- Always end endurance activities or vigorous exercise with 5 minutes of easy walking, to redistribute blood and cool down the body.
- Continue until breathing and pulse rate have returned to normal.

16 Relaxation Exercise




- Lie on back, knees bent and legs resting on a couch or chair
- Back of head is resting on a folded towel, back is flat to floor, hands are resting comfortably on abdomen
- Breathe quietly with no effort to inhale deeply until you feel completely relaxed
- As you take a slightly deeper breath, let your abdomen rise; then s-l-o-w-l-y exhale through pursed lips, letting your abdomen relax down
- Repeat as desired



17 Cool-Down Stretching

- To prevent muscle soreness, stretch out the muscles used vigorously by repeating a few of the stretching exercises described in the Warm-Up
- For example, after walking or cycling repeat stretches for hips, hamstrings and calf muscles

Feel Great! Finish up with a bath or warm, then cool shower; dry on a rough towel and dress in fresh clothing.



Additional Exercise/ Activity Programs for the Older Canadian

Fun and Fitness I Instructors Manual.
(Suitable for instructors and individual use)
Available from The Canadian Red Cross
Society, 95 Wellesley Street East, Toronto,
Ontario M4Y 1H6. Cost \$2.00.

Rainbow Exercise Book for Senior Citizens
Available from Action B.C. 1600 West 6th
Avenue, Vancouver, B.C. 6V6 1R3. Cost
\$2.50.

Fitness for People Over 60 by M. MacCallum.
(A maintenance program suitable for instruc-
tors or older persons with experience in fit-
ness classes) Available from Recreation
Branch, Senior Citizens Section, City of
Ottawa, 111 Sussex Drive, Ottawa K1N 5A1.
Cost \$1.00.

The Exercise Break A cassette of music and
accompanying handbook of warm-up exercises
suitable for use in senior citizen homes or
group programs. *Not available for individual home
use.* Available from Fitness Canada, 11th Floor,
365 Laurier Avenue West, Ottawa, Ontario,
K1A 0M5.



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